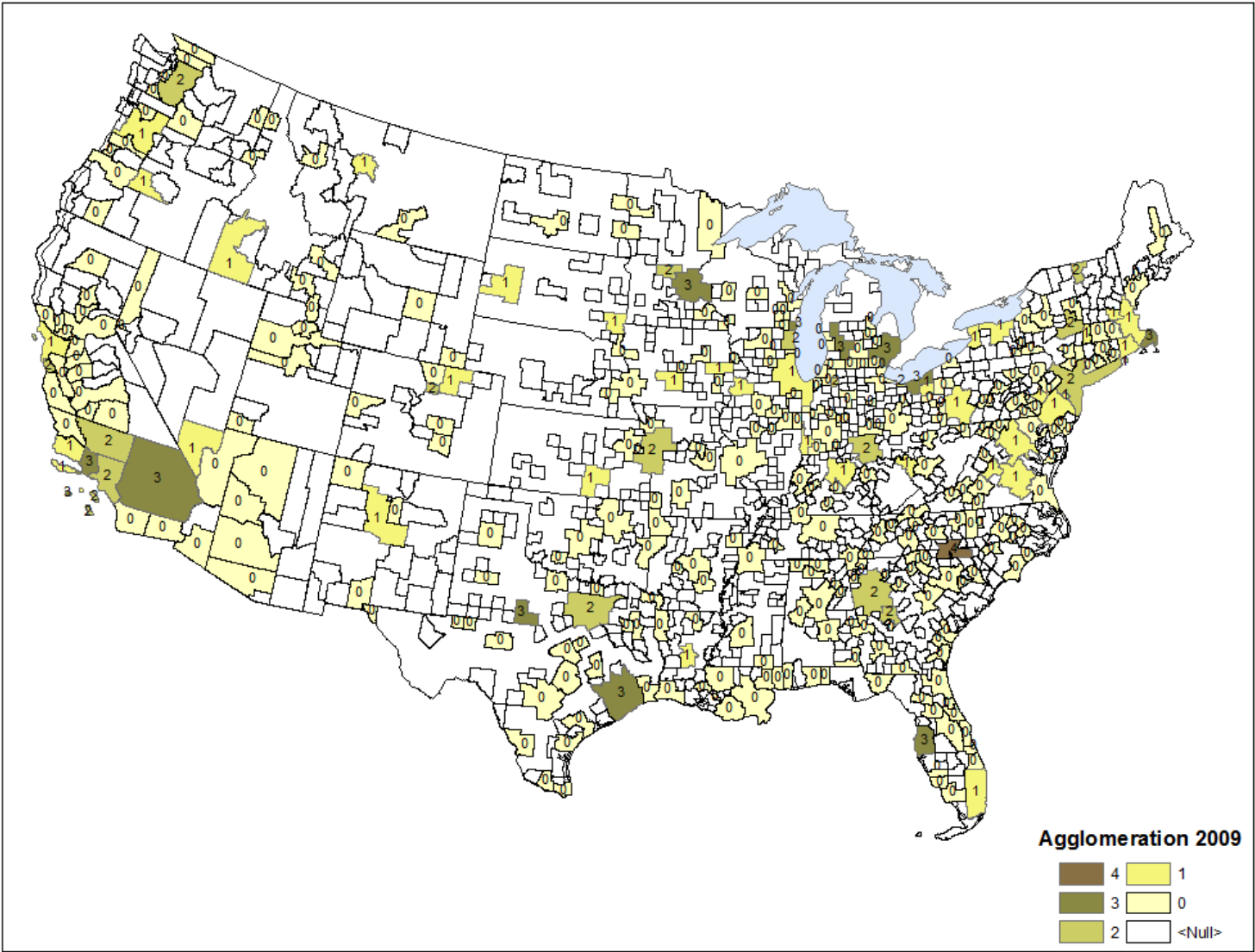


# **Agglomeration Economies, Regulatory and Fiscal Incentives for Alternative Energy: *Evidence from Wind Manufacturing in the United States***

***Dagney Faulk, Michael Hicks and Nalitra Thaiprasert***

# Monthly Wind Energy Production in the U.S.A. (trillions of BTU's)





# What Influences Location Decisions?

- Nice places for manufacturing?
- Windy places?
- Presence of other wind producers?
- Taxes?
- Regulatory support?

Table 2, Estimation Results, Poisson QML of Industry Sub-Groups in MSA  
(N=356; asymptotic z-statistics in parenthesis)

	Type	Component	Systems	Tower
C		-6.96 (-1.66)	-11.62*** (-4.58)	-0.30 (-0.05)
Population	D	-1.79 (-1.25)	-1.70* (-2.16)	-1.09 (0.48)
Personal Income	D	1.69 (1.19)	1.79* (2.28)	-0.85 (-0.45)
Average Manufacturing Wage	D	0.27 (0.46)	-0.13 (-0.26)	-0.76 (-0.69)
Percent of Adults with BA degree	D	-5.99 (-1.17)	-0.33 (-0.09)	8.51 (0.82)
Percent of Adults with AA degree	D	-35.30** (-2.44)	2.37 (0.33)	-6.49 (-0.53)
Manufacturing Share of Employment	A	-0.17 (-0.93)	1.33 (0.51)	5.27* (1.65)
Aggregation	A	0.88*** (3.65)	0.89*** (2.39)	1.88*** (3.81)
Windspeed	A	0.56 (0.70)	0.62 (1.29)	-0.90 (-0.62)
Corporate Income Tax	P	-0.41*** (-3.78)	0.04 (0.04)	0.01 (0.12)
Tax/Aggregation interaction	A/P	0.28*** (8.25)	-0.06 (-1.40)	-0.00 (-0.99)
Wind Production Tax Credits	P	0.24 (0.54)	0.33 (1.23)	-0.93 (-1.10)
Alternative Energy Portfolio Standards	P	-0.39 (-1.06)	0.34* (1.72)	-0.93 (-0.43)
Alternative Energy Manufacturing Tax Credits	P	0.88 (1.54)	1.76*** (6.17)	0.15 (0.18)
Adjusted R-squared		0.73	0.41	0.21
Std error of regression		0.15	0.29	0.21
Restricted log likelihood		-93.19	-173.83	-93.19
Mean dependent variable		0.07	0.18	0.07
Likelihood Ratio statistic†		115.57	109.91	71.20

Table 2, Estimation Results, Poisson QML of Industry Sub-Groups in MSA  
(N=356; asymptotic z-statistics in parenthesis)

	Type	Component	Systems	Tower
Agglomeration	A	0.88*** (3.65)	0.89*** (2.39)	1.88*** (3.81)
Windspeed	A			
Corporate Income Tax	P	-0.41*** (-3.78)		
Tax/Agglomeration interaction	A/P	0.28*** (8.25)		
Wind Production Tax Credits	P			
Alternative Energy Portfolio Standards	P		0.34* (1.72)	
Alternative Energy Manufacturing Tax Credits	P		1.76*** (6.17)	